

## **Democratization and Women's Representation in Presidential Cabinets: Evidence from East and Southeast Asia**

Don S. Lee  
University of Nottingham  
[don.lee@nottingham.ac.uk](mailto:don.lee@nottingham.ac.uk)

Soonae Park  
Seoul National University  
[psoonae@snu.ac.kr](mailto:psoonae@snu.ac.kr)

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### **Abstract**

This article examines patterns of women's cabinet representation across all presidential democracies in East and Southeast Asia since democratization. It demonstrates how the choice of female ministers differs across career backgrounds in presidential systems and further examines why young presidential systems in Asia are conducive to women's access to ministerial power through professional career tracks. We argue that despite women's successful performance in national legislative elections, women have been restricted to access the power resources necessary to target other political goals, such as cabinet positions, whereas democratic transition has provided broader avenues for women to emerge as professionals outside party politics. By analyzing original data on female ministers in East and Southeast Asia, the study finds that the share of women among professional ministers has increased over time, but women's share among political ministers has not changed significantly. Additionally, the different qualifications of female politicians and professionals also make them eligible for appointment to different types of policy areas in terms of prestige and gender. Our analysis suggests that women's cabinet representation has improved overall since democratic transition in Asia, but this improvement disguises contrasting outcomes in women's cabinet status according to their career backgrounds.

**Key Words:** Representation, Presidential Systems, Cabinet Appointments, East and Southeast Asia, Gender, Democratization

In this article, we explore women's representation in top executive posts of presidential systems in East and Southeast Asia (henceforth East Asia) that are characterized by the rise of female heads of state and the increasing proportion of female legislators. South Korea (2013), Taiwan (2016), and the Philippines (2016) have all seen female candidates elected as presidents or vice presidents by outperforming male candidates in national executive elections. The increase in women's legislative representation is also remarkable: as of 2016, 38% of legislators in Taiwan and 30% of Philippine representatives (lower chamber) are women. On average, women's representation in lower or single chambers of parliament in Asian democracies has doubled from 10.3% in 1993 to 22.3% in 2013.<sup>1</sup> Nonetheless, as illustrated in the following section, women's rise to ministerial power among female legislators has been surprisingly limited. Studies of women's representation in cabinets have provided important knowledge about the influence of political, socioeconomic, and institutional factors on this representation (Davis, 1997; Escobar-Lemmon & Taylor-Robinson, 2005; Krook & O'Brien, 2012; Reynolds, 1999; Siaroff, 2000; Studlar & Moncrief 1997; Whitford, Wilkins, & Ball 2007). However, while existing research on women ministers heavily focuses on other regions, including America, Europe, and Africa, Asian countries have been largely overlooked in the comparative literature, despite the important roles of cabinet appointments in stabilizing new democracies in the region (e.g., Slater, 2004).

To account for the variation in women's appointment to ministerial positions across cases and over time in East Asian presidential democracies, we focus on (1) women's empowerment through political and professional careers since democratization and (2) the policy areas female ministers are more likely to represent versus their male counterparts. We first discuss how the prevalence of female ministers differs across career backgrounds in presidential systems and further examine why young democracies in East Asia may be conducive to women's access to

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<sup>1</sup> As of 2010, the representation of women in legislatures is 16.9% globally (Bauer & Tremblay, 2011, p. 1).

ministerial power through professional career tracks. Then we look into how female ministers' career backgrounds influence types of policy areas they are more likely to represent vis-à-vis their male counterparts.

Presidential democracies in East Asia provide useful cases to examine distinct courses of women's ascendance to cabinet posts. The third wave of democratization throughout the region in the 1980's and 1990's has brought wider avenues for women to emerge as professionals who may help democratic presidents signal their commitment to administrative and social reform (Clark & Lee, 2000). An increasing proportion of female career civil servants and doctoral-degree holders in some of these countries has expanded a potential pool for female top executive officials. In contrast, women's advancement to ministerial positions has been relatively limited through political career tracks in East Asia. Despite women's successful performance in national legislative elections, women have been still restricted to access the power resources necessary to target other political goals (Batto, 2014; Thompson, 2015), such as cabinet positions.

In exploring the linkage between democratization, gender, and cabinet portfolios, we analyze original data on female cabinet ministers in all presidential democracies in East Asia from the time of their democratic transition through 2013. We find that, in general, women's access to ministerial power has increased since democratization. However, we also find different trends of women's access to cabinet posts for legislators and nonpolitical professionals. While the share of women among professional ministers has increased over time, women's share among political ministers has not changed significantly. With respect to portfolio allocation, female ministers are overall more likely to hold low-prestige and "feminine" posts and less likely to receive high-prestige portfolios than their male counterparts (Escobar-Lemmon & Taylor-Robinson, 2005; Krook & O'Brien, 2012), but the different qualifications of female politicians

and female professionals make them eligible for appointment to different policy areas. The likelihood of female politicians receiving posts concerning the public sphere of politics is not significantly different from that of male politicians. In addition, the likelihood of female professionals accessing gender-neutral portfolios is not significantly different from that of male professionals.

Given the central roles cabinet ministers play in policy making and implementation, it is critical to understand the ways in which women can access these positions and the policy areas that are given to women to represent as influential policy managers. Since personnel allocation influences the policies chief executives choose and affects the degree of accountability and responsiveness to constituents their policies represent, women's inclusion in cabinets can wield considerable influence over women's descriptive and substantive representation. Women's representation in cabinets, for example, leads to expanded female-friendly social policy (Atchison & Down, 2009). Countries with greater numbers of female ministers are also more likely to adopt state bureaucracies for gender mainstreaming (True & Mintrom, 2001). More importantly, having a female high-ranking official may enhance public perceptions of female managers' effectiveness, allowing other female officials to rise to the upper echelons of government (Jalalzai, 2008, 2013; Jalalzai & Krook, 2010).<sup>2</sup>

### **Distinct Patterns of Women's Representation in Presidential Cabinets in East Asia**

Asian women's share of cabinet positions has gradually increased since the region's democratization and political liberalization in the 1980s and 1990s (Fleschenberg, 2011; Tremblay & Bauer, 2011), replicating "a worldwide association between greater democracy and

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<sup>2</sup> Vice Minister Lee Bok-sil of the Ministry of Gender Equality and Family in South Korea (personal communication, April 19, 2016).

improved women's cabinet participation" (Arriola & Johnson, 2014, p. 496; see also Davis, 1997; Escobar-Lemmon & Taylor-Robinson, 2005; Krook & O'Brien, 2012; Reynolds, 1999; Studlar & Moncrief, 1997). While growing attention has been devoted to the appointment of female ministers in general, the choice of women for these positions is still perceived as an uncommon case in many presidential democracies. According to comparative work on cabinet appointment in presidential democracies, a separation of powers between executive and legislature shapes conditions where ministers are more or less likely to be selected into cabinet positions depending on their political affiliation. The gender and candidate selection literature also acknowledges "background characteristics as a proxy measure of abilities and character" (Norris & Lovenduski, 1995, p. 14). Yet, existing studies of gender and cabinets around the world rarely disaggregate women on the basis of their main career backgrounds to examine whether there are distinct patterns for their representation in cabinets.

Figure 1 describes the patterns of female ministers' access to cabinet posts, separating those with political and professional career backgrounds, in 21 presidential administrations from four East Asian democracies – Indonesia (1999-2013), the Philippines (1986-2013), South Korea (1988-2013), and Taiwan (1993-2013) – between the respective years of their democratic transition and 2013. Here, the Polity score, which lists a political regime ranging from 6 to 10 as a democracy, is used to determine the respective beginning year of democracy for these countries. Within these cases, the composition of cabinets was observed on a yearly basis using a list of ministers and their portfolio from the *CIA Directory of Chiefs of State and Cabinet Members of Foreign Governments*. Following the definition from the literature on cabinet appointments (e.g., Amorim Neto, 2006), political ministers are those affiliated with and representing political parties in the cabinet, whereas professional ministers are policy experts in their fields who are

not affiliated with any party at their appointment. Information on the backgrounds and party affiliations of ministers was collected from multiple sources including academic publications, local archives, news reports, and websites.

Of the 1,257 ministers in the dataset, 129 (about 10.3%) are women. Every administration included in the analysis has also chosen at least one female minister. However, Figure 1 reveals a stark contrast between political and professional women's access to cabinet posts. While only one administration in Southeast Asia (Indonesia) has failed to have a female professional minister, five administrations in Southeast Asia (Indonesia and the Philippines) have never appointed a female political minister. Across and within states, female professionals' access to cabinet posts has increased over time, but female politicians' access to power has been very limited. Appointments of female politicians to the cabinet, for example, have been stagnant in the Philippines and South Korea and are even decreasing in Indonesia. Given the impressive record of increases in women's legislative representation in these countries, the notable intra-gender difference in women's cabinet representation is puzzling. To understand these patterns and the role of women ministers in the governance of presidential democracies, we need a framework that connects appointments of women to cabinets to both women's empowerment through political and professional careers and to the specific policy areas they represent, examining gender as "a main cross-cutting category of democratic politics and policy making" (Fleschenberg & Derichs, 2011, p. 9).

[Figure 1 about here]

## **Democratization and Women's Representation in Presidential Cabinets**

Scholars of gender and politics have analyzed the determinants of women's presence in cabinets and found the demand for women ministers in presidential cabinets is a function of political benefits and costs of appointing woman to a post (Escobar-Lemmon & Taylor-Robinson, 2005). Although we agree that political calculations of such benefits and costs should play a role in the choice of female ministers, we disagree with the view that female ministers will be appointed solely for their gender without regard to their qualifications for the position. The observation of actual appointments of women to cabinets reveals two major gaps in the literature. First, women ministers are marked by their heterogeneity of career backgrounds in the literature (Borrelli, 2002; Davis, 1997; Norris & Lovenduski, 1995; Siaroff, 2000), but little is known about why women with particular backgrounds are more likely to ascend to power. Second, scholars of presidents and cabinets suggest that the aims of presidents in choosing ministers in institutional separation of powers systems differ depending on the ministers' affiliation with political parties (Amorim Neto, 2006; Martínez-Gallardo & Schleiter, 2015; Samuels & Shugart, 2010), an argument that is overlooked in existing work on female ministers. Together, these trends imply that there should be multiple pathways toward ministerial power for women of various career backgrounds in the cabinet.

Although women's access to cabinet posts is important in all circumstances, it deserves particular attention in presidential democracies. Before examining the role gender plays in the distribution of cabinet offices, it is important to understand how the appointment process is shaped by the institutional separation of powers. In these systems, party organizations are shaped in a way that a president, a *de facto* party leader in the governmental arena, can choose cabinet members without much intervention from her party (Samuels & Shugart, 2010). In contrast to parliamentary democracies, where a prime minister is a loyal representative of her parliamentary

party, a president "will stand for election on a personal platform rather than the party platform" and, once elected, may choose ministers beyond the party line even at the expense of her organization (Elgie, 2011, p. 395; see also Samuels & Shugart, 2010). The aims of presidents in selecting ministers and the qualifications of these ministers are also clearly distinguished according to their career backgrounds. While appointing political ministers can help to shore up legislative support for a president's policy programs, naming professional nonpartisans in the cabinet may provide advantages for managing policy implementation (Amorim Neto, 2006; Martínez-Gallardo & Schleiter, 2015). Existing research on female ministers also acknowledges the importance of the constitutional design and executive-legislative relations in determining women's access to ministerial posts (Jalalzai, 2013; Krook & O'Brien, 2012). However, the failure of the literature to distinguish female ministers according to their career backgrounds, particularly their political affiliation, and to further recognize their distinct patterns of access to ministerial power obfuscates any causal link between when and where women with particular backgrounds are more likely to rise and their actual representation in cabinets.

In this article, we argue that presidents may have to limit female representation among political ministers, because there are relatively fewer women who can exert legislators' influence in policy formulation on behalf of them. According to the candidate selection literature, political parties should play a central role in the supply of female political elites to cabinet positions (Barnea & Rahat, 2007; Field & Siavelis, 2008; Krook, 2010; Norris & Lovenduski, 1993, 1995). Yet, in political environments of young democracies, parties often show lower degrees of inclusiveness and higher degrees of leadership control in the candidate selection procedures due to the nature of greater political uncertainty and higher party fluidity (Field & Siavelis, 2008, pp. 630-632). Such political environments tend to allow only limited female representation. It is



often male leaders who can secure access to a party's resources, build political networks that would grant them larger influence, and ultimately make decisions on candidate selection procedures. Politically active women have had to rely on men to access their party's resources and organized interests, and therefore, relatively few women have had the political connections necessary to pursue other political goals (Arriola & Johnson, 2014; Beck, 2003). Therefore, when presidents appoint ministers who can shore up political support for their policy agenda and their administration, such constraints prevent them from choosing more women among politicians.<sup>3</sup>

The nature of party politics and its candidate selection procedures in East Asian young democracies provides a clear answer to the puzzle of why women's access to cabinet positions has been constrained through political careers. Although we have seen the election of female presidents and vice presidents and the increasing proportion of female legislators in East Asia, only a few women who inherited their family members' political legacy are in an initially advantageous position to succeed (Derichs & Thompson, 2013; Thompson, 2015). While adopting gender quotas in Indonesia, South Korea, and Taiwan has helped to boost the electability of female candidates, it has not necessarily led to the increasing supply of female political elites equipped with the power resources and political connections needed for other political positions (Batto, 2014; Thompson, 2015). Moreover, centralized and exclusionary candidate selection procedures, controlled by male-dominated and personalistic parties, have been unfavorable to women's selection and succession into leadership positions with party organizations. In South Korea, female candidates have been more often nominated for proportional representation (PR) seats than allowed to compete for single-member district (SMD) seats where they can accumulate political resources (Lee & Shin, 2016). Similarly, in Taiwan,

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<sup>3</sup> Legislator Mei-nu Yu in Taiwan (personal communication, February 6, 2018).

women have been more likely to be nominated as PR-tier candidates rather than SMD-tier candidates, particularly under the new electoral rule since 2008, and once elected, female legislators have been assigned to low-prestige committees rather than key issue committees and have been less able to take active committee leadership positions such as conveners, blocking their accumulation of power (Batto, 2014). In Indonesia, although recent electoral reform into open-list PR with a gender quota and placement mandate led to the election of more women than before, with weak party support and resource bases, it is not certain whether this positive change will lead to more women in the cabinet (Bessell, 2010).

On the other hand, presidents may enhance female representation among professional ministers, because there are increasingly more women who can provide expertise for managing policy implementation. Not only has the immature party system of young democracies made East Asian government more conducive to nonpartisanship in the cabinet, women in East Asia have been able to advance as professionals in diverse fields outside party politics, such as academia, public service, journalism, and art. Since democratization, the increasing proportion of women who hold doctoral degrees or pass national civil service exams has expanded a potential pool of professional women who are eligible for high-ranking government offices in South Korea and Taiwan. Moreover, democratic transition has provided broader avenues for a better-organized women's movement and the emergence of women as leaders of independent interest groups and reform advocates who promote social change, both factors pushing governments to enact necessary reforms (Clark & Lee, 2000). For chief executives in young democracies who intend to signal their commitment to reform and better policy performance, women with policy expertise and reputations as social activists have been precious cabinet appointees (Arriola & Johnson, 2014). In East Asia, such cases have never been rare. In the Philippines, Corazon

Soliman, a leader in the civil society community, was appointed to connect the government and civil society as a secretary of the Social Welfare and Development Department.<sup>4</sup> Sri Mulyani Indrawati of Indonesia, an executive director on the board of the International Monetary Fund known as a tough reformist, was appointed to lead national economic policy as a finance minister for five years. In sum, we predict that democratic transition has led to distinct patterns of women's cabinet representation according to their career backgrounds.

*Hypothesis 1:* The age of democracy will increase the share of females among professional ministers.

*Hypothesis 2:* The share of females among political ministers may not increase with the age of democracy.

We further examine the process of portfolio allocation to confirm whether appointees' qualifications as well as their gender are considered for cabinet appointments. Studies of gender and cabinets commonly find gendered patterns in portfolio allocation: female ministers are more likely to be assigned to low-prestige and "feminine" offices and are less likely to receive high-prestige posts (Borrelli, 2002; Davis, 1997; Escobar-Lemmon & Taylor-Robinson, 2009; Lovenduski, 1986; Martin, 2003; Reynolds, 1999; Studlar & Moncrief, 1999). Given that the overall status of women remains marginal in cabinets around the world (Bauer & Tremblay, 2011), we might see these patterns persist in East Asian presidential cabinets. Yet, we also predict to witness an evolving trend of women's appointments that is characterized by female politicians and female professionals being more likely to receive certain posts fitting their résumés.

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<sup>4</sup> Secretary C. Soliman in the Philippines (personal interview, May 6, 2013).

Indeed, the executive allocation of cabinet seats in East Asia has been made in ways that they are distributed to ministers whose qualifications are most suitable to manage relevant policy areas (Lee, 2015), and we believe women's cabinet appointments will not deviate from this norm. As examined above, women are sometimes appointed to the cabinet from among the ranks of parliamentarians due to their extensive political experience; at other times, women are recruited to the cabinet from outside party politics due to their professional expertise. Evidence from East Asian presidential systems also indicates that female political candidates have no inferior qualifications to their male counterparts (Huang, 2016). Therefore, the types of posts assigned to women will map closely onto their career backgrounds (see Escobar-Lemmon & Taylor-Robinson, 2005; Krook & O'Brien, 2012 for details of classification).

Cabinet portfolios concerning "the public sphere of politics" (masculine posts) are more often delegated to women with political influence (Krook & O'Brien, 2012, p. 844). On the other hand, ministries that are responsible for controlling public-goods provisions (medium-prestige posts) may be a better fit for women with policy expertise (Krook & O'Brien, 2012, p. 845). In addition, as occurs commonly in Africa, Europe, and Latin America (Arriola & Johnson, 2014; Davis, 1997; Escobar-Lemmon & Taylor-Robinson, 2009; Siaroff, 2000), increasing opportunities for women with professional expertise to access cabinet positions may enable female professionals to become eligible for "gender-neutral" posts. Therefore, we predict that:

*Hypothesis 3:* The likelihood of female politicians accessing posts concerning the public sphere of politics (masculine posts) is not significantly different from that of male politicians.

*Hypothesis 4a:* The likelihood of female professionals accessing public-goods related posts (medium-prestige posts) is not significantly different from that of male professionals.

*Hypothesis 4b:* The likelihood of female professionals accessing gender-neutral posts is not significantly different from that of male professionals.

## **Data and Methods**

### ***Dependent Variables***

To test our hypotheses, we use two sets of original data on ministerial appointments to presidential cabinets in four East Asian democracies from the respective years of their democratic transition through 2013. We employ the cabinet-level dataset, presented in Figure 1, to test the first two hypotheses and the individual-level dataset, based on the same sources, to test the last two hypotheses.

For our analyses, we adopt two different sets of dependent variables. In order to test Hypotheses 1 and 2, we introduce three dependent variables to estimate three models, respectively (Table 1). Model 1 uses the proportion of cabinet seats occupied by women as the dependent variable. We employ this model as the benchmark against the two following models, examining the overall status of women's representation in East Asian presidential cabinets. For the dependent variable of Model 2, we use women's cabinet representation among political ministers, measured by the number of cabinet seats held by female politicians out of the total cabinet seats held by politicians. In Model 3, the dependent variable is women's cabinet representation among professional ministers, measured by the number of cabinet seats held by female professionals out of the total cabinet seats held by professionals.

To test Hypotheses 3 and 4, we introduce six dichotomous variables as our dependent variables, following the template devised by Escobar-Lemmon and Taylor-Robinson (2005, p. 833) and Krook and O'Brien (2012, pp. 844-845): three variables in the prestige type and three variables in the gender type. By these criteria, portfolios are categorized as high-prestige,

medium-prestige, and low-prestige (prestige type), and masculine, neutral, and feminine (gender type). First, with regard to the prestige type of positions, high-prestige positions involve the most important policy areas, such as economic management, foreign affairs, national defense, and internal affairs. Medium-prestige posts involve policy areas concerning the government's role as a public goods provider, including education, environment and natural resources, health and social welfare, and transportation and communication. Low-prestige positions cover such areas as children and family, culture and tourism, and women's affairs. Second, in terms of the gender type of positions, masculine posts typically concern the public sphere of politics and the economy and have been historically associated with men, whereas feminine posts concern the private sphere of home and the family and have been closely connected to women (Krook & O'Brien, 2012, p. 844). The former posts include ministries such as agriculture, defense, finance, foreign affairs, and labor, and the latter posts are composed of topics like children, education, health, and women's affairs. Gender-neutral posts typically include energy, justice, and tourism. Therefore, our dependent variables in Models 4 through 9 in Table 2 and in Models 10 through 15 in Table 3 are whether political and professional ministers, respectively, hold these specific types of portfolios.

### ***Independent and Control Variables***

For our analyses, we have two main independent variables. To test the first two hypotheses, which concern changes in women's share of cabinet posts with the age of democracy, we include the number of years since the country's democratic transition. Since the impact of the consolidation of democracy on women's cabinet representation is not immediate and not perfectly linear, we take the log of a year and use a year of time lag for this variable. To test for

gender effects in portfolio allocation (H3 and H4), we include a dichotomous variable which takes the value 1 if ministers are female.

Beyond the key covariates, we also include several additional variables to control for factors that may otherwise affect the results in systematic ways. First, we include a set of variables that shape the dynamics of executive-legislative relations and might affect the executive choice of female ministers in presidential democracies: *constitutional powers*, *presidents' support in legislature*, *electoral cycle*, and *term limits*. The first control variable, *constitutional powers*, measures formal powers granted to the president. We adopt the classification by Shugart and Carey (1992, p. 150) and apply their ordinal scales to information from the constitutions of the four East Asian democracies and other academic sources (see Kasuya, 2013, pp. 16-24). The second control variable, *presidents' support in legislature*, measures a president's partisan powers based on their capacity to shape the policymaking process that comes from the president's standing in relation to the party system (Shugart & Mainwaring, 1997). As a measure of a president's partisan strength, we employ the proportion of seats occupied by the president's party in the lower or only chamber (Cheibub, 2007, p. 75). The third control variable, *electoral cycle*, measures the number of months left until the end of the president's term (Shugart & Carey, 1992). The fourth control variable, *term limits*, measures whether a president can run for re-election or not. This is a dichotomous variable that gives a value of 1 if a president can seek re-election and 0 otherwise. We predict that these variables will be significantly associated with women's share of cabinet posts if gendered patterns of women's cabinet representation are in action in presidential democracies.

Second, we control for variables that may significantly affect the choice of female ministers as indicated in the literature. Given the rise of female heads of state in East Asian

democracies, it is of interest to test whether *female presidents* are more likely to appoint women to the cabinet. We also account for whether presidents are from a *left party* as female ministers may be more likely to emerge in left-leaning governments (Escobar-Lemmon & Taylor-Robinson, 2005, p. 831).<sup>5</sup> In addition, we control for the magnitude of *cabinet reshuffling* by including the proportion of cabinet seats replaced in a given year as female ministers may have more chances to be selected with a major cabinet reshuffle (Borrelli, 2002).

Lastly, we also include a set of variables concerning women's participation in national legislatures and women's status in society: the percentage of seats occupied by women in the lower (or only) chamber, the proportion of the labor force composed of women, and the overall level of a country's socioeconomic development (Arriola & Johnson, 2014; Escobar-Lemmon & Taylor-Robinson, 2005; Inglehart & Norris, 2003; Krook & O'Brien, 2012).<sup>6</sup> We expect women's share of cabinet posts to be greater when values on these measures and conditions are higher.

In the individual-level models (Tables 2 and 3), other than these control variables, we include a set of variables characterizing ministers' biographical, educational, and political backgrounds: *age* (in years), *education* (1 if the minister has a bachelor's as the highest degree, 2 if the minister has a master's as the highest degree, and 3 if the minister has a doctoral degree), and *legislative experience* (the length of service as a member of the legislature in years). Descriptive statistics for all independent and control variables are presented in the appendix.

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<sup>5</sup> To measure this variable, we follow Escobar-Lemmon and Taylor-Robinson (2005), thereby coding "whether the president was to the left or right of the second-place finisher" (834). The data sources for this variable are Dalton and Tanaka (2008) and multiple news reports and websites.

<sup>6</sup> The percentage of seats occupied by women in the lower chamber is based on data from the Inter-Parliamentary Union. The proportion of the labor force composed of women is based on data from the World Bank's Gender Statistics Data Base. The overall level of a country's socioeconomic development is based on the United Nations Development Programme's Human Development Index. The data sources for these variables in Taiwan are the Legislative Yuan website (<http://www.ly.gov.tw/innerIndex.action>) and the Executive Yuan's Directorate-General of Budget, Accounting and Statistics website (<http://www.dgbas.gov.tw/mp.asp?mp=1>).



### ***Model Choice***

We use two different analytical methods to estimate models based on two datasets in different levels. First, we estimate women's share of cabinet appointments using Generalized Estimating Equations (GEE) to address estimation issues concerning the time-series cross-sectional structure of our dataset (Zorn, 2001). Changes in cabinet formation frequently occur during presidential terms in East Asia (Lee, 2015), and 35% of the ministers in our sample serve less than a year. We thus model women's cabinet share yearly, because cabinet shuffles typically happen several times a year. We also correct for serial autocorrelation, particularly first-order autocorrelation within each case, by using GEE. This approach has been used by Escobar-Lemmon and Taylor-Robinson (2005) to estimate women's cabinet representation for proportion data that are time-series cross-sectional. Second, for an individual-level analysis, we use logistic analysis to estimate the likelihood of political and professional female ministers holding any of the six different types of posts across the prestige and gender criteria. In all models, we estimate heteroscedasticity and autocorrelation consistent standard errors that are robust to general forms of spatial and temporal dependence and also include country-level fixed effects to account for unobserved heterogeneity across East Asian countries.

### ***Results***

The results of our analyses, presented in Tables 1 through 3, support the main argument developed in this article. With the age of democracy in East Asia, women are more likely to ascend to ministerial power through professional expertise but still have limited access to cabinet posts through political career tracks. While women are generally more likely to be assigned to

low-prestige and feminine posts and less likely to receive high-prestige posts, the different qualifications of female politicians and professionals make them more eligible for particular types of cabinet positions. These results are robust after including relevant political and socioeconomic controls. Specific results are discussed below.

[Table 1 about here]

In Table 1, the findings associated with the development of democracy suggest that while women's access to ministerial power has increased over time, it has trended differently depending on their career backgrounds. In Model 1, the estimated coefficient on the *age of democracy* is positive and statistically significant. Consistent with Hypotheses 1 and 2, the *age of democracy* has a positive and statistically significant impact in Model 3 but fails to reach statistical significance in Model 2. As democracy matures in East Asia, cabinet positions have become increasingly accessible to female professionals, but the same has not happened for female politicians. According to Models 1 and 3, increasing the age of democracy by 10 percent would lead to a 2 percentage point increase in women's overall share of cabinet ministers and a 1.1 percentage point increase in women's share of professional ministers, holding all other variables constant.

Some of our control variables also produce interesting results. First, a set of four controls that shape the dynamics of executive-legislative relations show significant and consistent results across Models 1 and 3. In both models, the coefficients on *constitutional powers* are negative, but the coefficients on *presidents' support in legislature*, *electoral cycle*, and *term limits* are positive. While women's shares among cabinet ministers and professional ministers are reduced

as presidential constitutional powers increase, these shares are likely to increase when presidents gain legislative support, are earlier in their terms, and can run for re-election. Some of these findings confirm the literature suggesting that the electoral calendar influences a president's momentum to choose a female minister (Borrelli, 2002). At the beginning of the term, newly elected presidents enjoying a honeymoon period may be more likely to risk selecting a female minister. Further research on this subject will shed light on demand-side factors for women's cabinet representation by examining the relationship between the political dynamics of executive-legislative relations and presidential incentives to select female ministers.

Second, our control variables from the gender and cabinets literature provide insights for democratic politics in East Asia. The coefficients on *female presidents* are positive and statistically significant in Model 3 but fail to attain statistical significance in Model 2, suggesting that only women's share of professional ministers is greater under female presidents. Although female leaders want to hire more female politicians into the cabinet, they often face a relatively small pool of qualified female politicians (Norris & Lovenduski, 1993, 1995; Jensen, 2008), thereby possibly appointing more female professionals instead. Consider the first female president of Taiwan, Tsai Ing-wen's cabinet appointments. Although Tsai was expected to choose more female ministers, she selected only one female politician for her cabinet; instead, she appointed three more female professionals to the cabinet. The coefficients on *left party* are statistically significant and negative in Model 2 but positive in Model 3, suggesting that left-leaning governments reduce women's share of political ministers but enhance women's share of professional ministers. This finding is partially consistent with previous research on female ministers (Krook & O'Brien, 2012; Reynolds, 1999), and future research can unpack the reasons

why left-leaning governments adopt separate recruitment decisions for female ministers across career backgrounds.

In addition, a few of the estimated coefficients on political and socioeconomic controls attain statistical significance. In Models 1 and 2, women's labor force participation has a negative and statistically significant effect on women's cabinet share. The findings related to women's labor force participation, however, are not consistent across existing studies; some have found them to be positive (Krook & O'Brien, 2012), others observed negative results (Arriola & Johnson, 2014), and still others found no statistical significance (Escobar-Lemmon & Taylor-Robinson, 2005). The coefficient on a country's *socioeconomic development level* is positive and statistically significant in Model 1, consistent with the literature (Escobar-Lemmon & Taylor-Robinson, 2005).

The results in Table 1 are based on women's appointment to cabinets. However, our hypotheses further examine the relationship between women's particular backgrounds and the policy areas they are more likely to represent than their male counterparts. In Tables 2 and 3, the empirical results suggest that women's status is still marginalized in East Asian presidential cabinets as they are more likely to be assigned to positions in less important issue areas, but they also tend to receive posts that match the characteristics of their career backgrounds. These findings are robust to the inclusion of ministers' biographical, educational, and political backgrounds.

[Table 2 about here]

Table 2 presents the results of a logistic analysis of female political ministers and their portfolio assignments. In Model 7, the coefficient on *gender* is negative but fails to reach statistical significance. As predicted by Hypothesis 3, female political ministers had no significant difference in receiving posts concerning the public sphere of politics ("masculine" portfolios) than their male counterparts. While this finding supports our argument that women will receive certain posts fitting their résumés, we also confirm gendered patterns in portfolio allocation. The coefficients on *gender* are statistically significant and negative in Model 4 but positive in Models 6 and 9, suggesting that female politicians overall were more likely to receive low-prestige and "feminine" posts and less likely to hold high-prestige posts than male politicians (Borrelli, 2002; Davis, 1997; Escobar-Lemmon & Taylor-Robinson, 2009; Krook & O'Brien, 2012). They have an 11% lower likelihood of a high-prestige appointment, a 23.9% higher chance of attaining a low-prestige post, and a 36.3% higher probability of receiving a feminine ministry portfolio allocation than their male counterparts. Additionally, the coefficients on *gender* are negative in both Models 5 and 8 but fail to attain statistical significance in the latter model. While female politicians were less likely to receive medium-prestige posts (13.1%), they had no significant difference in holding gender-neutral posts than their male counterparts.

[Table 3 about here]

Table 3 presents the results related to female professional ministers and their portfolio assignments. In Models 11 and 14, the coefficients on *gender* are negative but do not reach statistical significance in the latter only, which confirms Hypothesis 4b but not Hypothesis 4a. Female professionals were indeed not less likely to hold gender-neutral posts but were less likely

to receive posts related to public-goods provisions (medium-prestige portfolios) than their male counterparts. As the age of democracy in East Asia increases, we correctly predicted women's increasing ascension to ministerial power through professional fields, but their access to conventionally male-dominated policy areas shows mixed signals. Similar to their political sisters, professional female ministers were overall more likely to be assigned to low-prestige and feminine posts and less likely to receive high-prestige portfolios than professional male ministers. They have a 7.2% lower probability of attaining a high-prestige position (Model 10), a 21.4% higher chance of being appointed to a low-prestige ministry (Model 12), and a 28.3% higher likelihood of receiving a feminine post (Model 15) than their male counterparts. In addition, female professionals were also 21.6% less likely to hold masculine posts (Model 13). In sum, we find that, in East Asia, women tend to be excluded from cabinet power by being assigned to low-prestige and feminine issue areas rather than key policy areas. However, we also find that women are beginning to gain ground in certain issue areas that were male-dominated.

The results concerning individual ministers' backgrounds in Tables 2 and 3 demonstrate that the allocation of cabinet portfolios, particularly key positions, to political and professional ministers operates according to a different set of selection criteria. The coefficients on *legislative experience* are positive and statistically significant in Model 4 but fail to reach statistical significance in Model 10. According to Model 4, an increase in a political minister's legislative experience from its observed minimum to one standard deviation above the minimum values leads to 2.4 percentage points increase in the likelihood of a high-prestige appointment. This finding indicates that in the allocation of high-prestige posts, legislative experience has a positive effect for political ministers but no effect for professional ministers. The coefficients on *education* are statistically significant across most models in Table 3 but fail to attain statistical

significance in any models in Table 2. Based on the estimates in Models 10 and 12, an increase in a professional minister's education level from its observed minimum to maximum values leads to 24.3 percentage points decrease in the likelihood of a high-prestige appointment but 17.5 percentage points increase in the likelihood of a low-prestige appointment. This finding suggests that educational backgrounds play a central role in the distribution of various types of posts to professional ministers but a lesser role in the distribution of these posts to political ministers. This finding demonstrates that academic degrees are counted as one of the key elements of professional ministers' credentials and also supports our argument that political and professional ministers are appointed to cabinet positions according to different selection criteria. Yet, the positive and statistically significant coefficients on *age* in both Models 4 and 10 indicate that key posts tend to go to more experienced individuals. An increase in political and professional ministers' age from its observed mean to one standard deviation above the mean values leads to 9.3 and 6.3 percentage points increase, respectively, in the likelihood of a high-prestige appointment.

The results related to the factors shaping the political dynamics of executive-legislative relations offer interesting implications. In Table 2, presidential constitutional powers have negative effects on the allocation of more important posts but positive effects on the allocation of less significant posts, while these signs tend to be flipped in Table 3. These findings suggest that constitutionally weak presidents may seek legislative support by giving key posts to political ministers and avoiding assigning them low-profile posts, whereas more powerful formal authority can help presidents to shift their focus to policy effectiveness, enabling them to assign prime cabinet posts to professional ministers. In adjusting to variations in formal presidential

authority, chief executives not only change cabinet composition (Amorim Neto, 2006; Cheibub, 2007) but also vary the pattern of portfolio assignments (Lee, 2015).

## **Conclusion**

The literature on gender and cabinets recognizes women ministers as a group of elites with diverse demographic, occupational, and political backgrounds. Existing research also suggests that women ministers more often rise to power through professional backgrounds rather than through political careers (Arriola & Johnson, 2014; Davis, 1997; Escobar-Lemmon & Taylor-Robinson, 2009; Siaroff, 2000). However, little is known about why women with particular backgrounds are more likely to ascend to power and which policy areas women with different backgrounds are more likely to represent than their male counterparts. Recognizing the recent rise of female heads of state and legislators in East Asia, an understudied region in the comparative literature, this article analyzes the appointment patterns of female ministers, distinguishing politicians and professionals, across all East Asian presidential democracies.

Employing original data on cabinet formation and minister profiles covering four East Asian democracies over 20 years, our analysis demonstrates that there have been indeed different patterns of women's ascension to ministerial power between political and professional ministers since democratization. While the centralized and exclusionary candidate selection procedures of parties in transitional political environments have been unfavorable to female politicians' selection into cabinet positions, democratic transition has provided broader avenues for women to emerge as professionals outside party politics. With regard to policy areas that women can access, although female ministers are commonly more likely to receive minor positions and less likely to hold major positions, the different credentials of female politicians and professionals



also make them eligible for appointment to different types of portfolios. Our analysis suggests that women's cabinet representation has improved overall since democratic transition, but this improvement disguises contrasting outcomes in women's cabinet status according to their career backgrounds.

In analyzing the distinct patterns of women's rise to ministerial power, future work should delve into an array of other factors as these patterns may not follow a single path as democracies evolve. The mainstream literature on presidential cabinet formation provides a complicated mechanism to account for a chief executive's strategy facing diverse institutional constraints, but this mechanism has remained gender-blind (Waylen, 2003). In this article, we introduced some of the factors shaping the dynamics of executive-legislative relations in the institutional separation of powers and briefly looked into their effects on women's cabinet representation. Further research along this line, particularly on the contexts conducive to women's access to cabinet positions and the incentives driving such appointments, will help to better understand the gendered patterns of women's cabinet representation in presidential democracies.

Our analysis has important political and policy implications for women's descriptive and substantive representation. Given the evidence that female members with legislative backgrounds have greater experience and knowledge about bill making and may initiate more bills than those without such backgrounds (Escobar-Lemmon, Schwindt-Bayer, & Taylor-Robinson, 2014), limited female representation among political ministers may harm the prospects of enacting and implementing policies related to women's issues in East Asian governments. Existing research has begun to explore the role of women ministers in policy making (Escobar-Lemmon & Taylor-Robinson, 2016), but whether there is any systematic

difference in behavior between female politicians and professionals is still unknown. To fully understand the causes and consequences of the patterns of women's appointments, we need to consider how attributes of individual female ministers may be closely related to their actual behavior in presidential cabinets. Such analysis will also have important implications for women's substantive representation.

## References

- Amorim Neto, O. (2006). The presidential calculus: Executive policy making and cabinet formation in the Americas. *Comparative Political Studies*, 39(4), 415-440.
- Arriola, L. R., & Johnson, M. C. (2014). Ethnic politics and women's empowerment in Africa: Ministerial appointments to executive cabinets. *American Journal of Political Science*, 58, 495-510.
- Atchison, A., & Down, I. (2009). Women cabinet ministers and female-friendly social policy. *Poverty & Public Policy*, 1, 1-23.
- Barnea, S., & Rahat, G. (2007). Reforming candidate selection methods: A three-level approach. *Party Politics*, 13, 375-394.
- Batto, N. F. (2014). Was Taiwan's electoral reform good for women? SNTV, MMM, gender quotas, and female representation. *Issues and Studies*, 50(2), 39-76.
- Bauer, G., & Tremblay, M. (2011). Introduction. In G. Bauer & M. Tremblay (Eds.), *Women in Executive Power: A Global Overview* (pp. 1-9). New York, NY: Routledge.
- Beck, L. J. (2003). Democratization and the hidden public: The impact of patronage networks on Senegalese women. *Comparative Politics*, 35(2), 147-169.
- Bessell, S. (2010). Increasing the proportion of women in the national parliament: Opportunities, barriers and challenges. In E. Aspinall & M. Mietzner (Eds.), *Problems of Democratisation in Indonesia: Elections, Institutions and Society* (pp. 219-242). Institute of Southeast Asian Studies.
- Borrelli, M. (2002). *The president's cabinet: Gender, power, and representation*. Lynne Rienner Publishers.
- Cheibub, J. A. (2007). *Presidentialism, parliamentarism, and democracy*. Cambridge: Cambridge University Press.

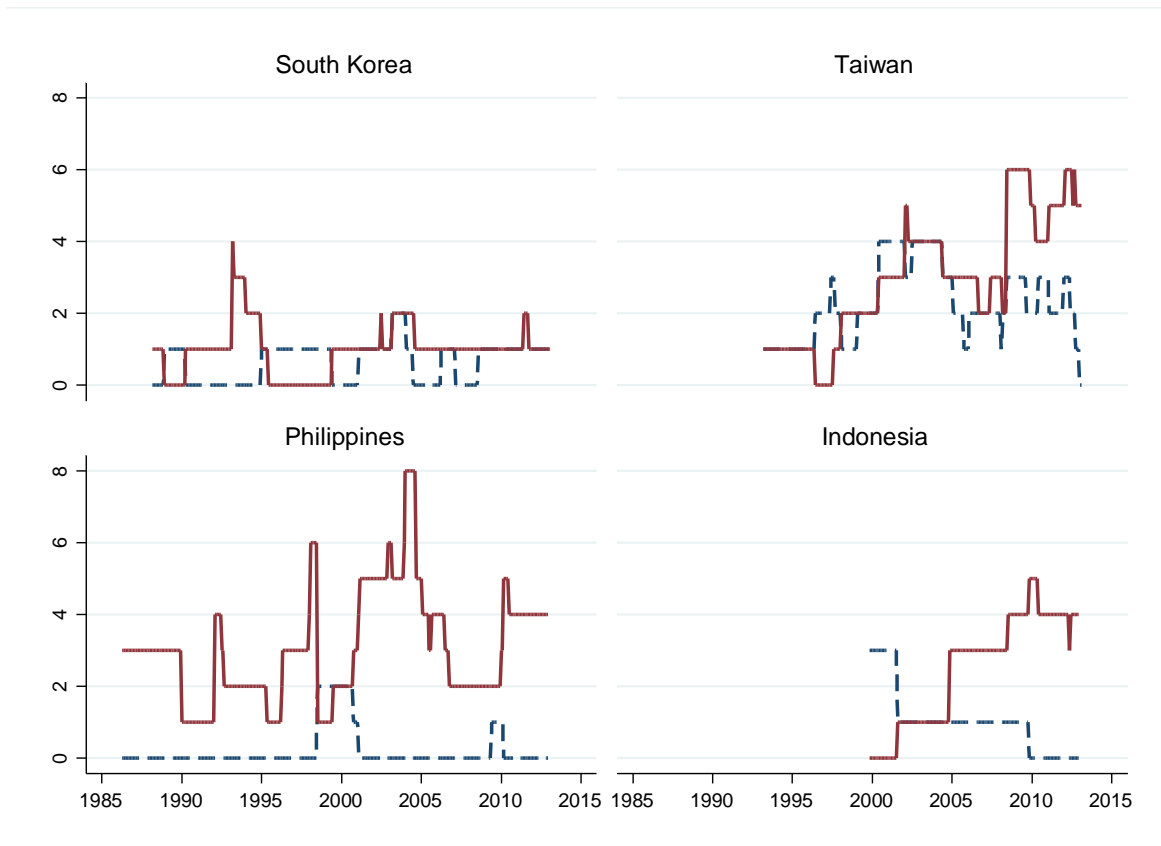
- Clark, C., & Lee, R. J. (2000). Women's status in East Asia. In R. J. Lee & C. Clark (Eds.), *Democracy and the status of women in East Asia* (pp. 1-21). Lynne Rienner Publishers.
- Dalton, R. J., & Tanaka, A. (2008). The patterns of party alignment. In R. J. Dalton, D. C. Shin, & Y. Chu (Eds.), *Party politics in East Asia: Citizens, elections, and democratic development* (pp. 27-47). Lynne Rienner Publishers.
- Davis, R. H. (1997). *Women and power in parliamentary democracies: Cabinet appointments in Western Europe, 1968-1992*. University of Nebraska Press.
- Elgie, R. (2011). Presidentialism, parliamentarism and semi-presidentialism: Bringing parties back in. *Government and Opposition*, 46(3), 392-409.
- Escobar-Lemmon, M. C., & Taylor-Robinson M. M. (2005). Women ministers in Latin American government: When, where, and why? *American Journal of Political Science*, 49, 829-844.
- Escobar-Lemmon, M. C., Schwindt-Bayer, L. A., & Taylor-Robinson, M. M. (2014). Representing women: Empirical insights from legislatures and cabinets in Latin America. In M. C. Escobar-Lemmon & M. M. Taylor-Robinson (Eds.), *Representation: The case of women* (pp. 205-226). New York, NY: Oxford University Press.
- Escobar-Lemmon, M. C., & Taylor-Robinson M. M. (2009). Getting to the top: Career paths of women in Latin American cabinets. *Political Research Quarterly*, 62, 685-699.
- Escobar-Lemmon, M. C., & Taylor-Robinson M. M. (2016). *Women in presidential cabinets: Power players or abundant tokens?* Oxford University Press.
- Field, B. N., & Siavelis P. M. (2008). Candidate selection procedures in transitional polities: A research note. *Party Politics*, 14, 620-639.
- Fleschenberg, A. (2011). South and Southeast Asia. In G. Bauer & M. Tremblay (Eds.), *Women in executive power: A global overview* (pp. 23-44). New York, NY: Routledge.
- Fleschenberg, A., & Derichs, C. (2011). *Women and politics in Asia: A springboard for democracy?* LIT Verlag.
- Huang, C. (2016). Reserved for whom? The electoral impact of gender quotas in Taiwan. *Pacific Affairs*, 89(2), 325-343.
- Inglehart, R., & Norris, P. (2003). *Rising tide: Gender equality and cultural change around the world*. Cambridge University Press.
- Jalalzai, F. (2008). Women rule: Shattering the executive glass ceiling. *Politics & Gender*, 4(2), 205-231.

- Jalalzai, F. (2013). *Shattered, cracked, or firmly intact?: Women and the executive glass ceiling worldwide*. Oxford University Press.
- Jalalzai, F., & Krook M. L. (2010). Beyond Hillary and Benazir: Women's political leadership worldwide. *International Political Science Review*, 31(1), 5–21.
- Jensen, J. S. (2008). *Women political leaders: Breaking the highest glass ceiling*. New York: Palgrave.
- Kasuya, Y. (2013). A framework for analysing presidential-legislative relations in Asia. In Y. Kasuya (Ed.), *Presidents, assemblies and policy-making in Asia* (pp. 10-39). Palgrave Macmillan UK.
- Krook, M. L. (2010). *Quotas for women in politics: Gender and candidate selection reform worldwide*. Oxford University Press.
- Krook, M. L., & O'Brien, D. Z. (2012). All the president's men? The appointment of female cabinet ministers worldwide. *Journal of Politics*, 74, 840-855.
- Lee, D. S. (2015). *Presidential cabinet formation as leadership strategy in Asian democracies* (Unpublished doctoral dissertation). University of California, San Diego, CA.
- Lee, H., & Shin, K. (2016). Gender quotas and candidate selection processes in South Korean political parties. *Pacific Affairs*, 89, 345-368.
- Lovenduski, J. (1986). *Women and European politics: Contemporary feminism and public policy*. University of Massachusetts Press.
- Martin, J. M. (2003). *The presidency and women: Promise, performance, and illusion*. Texas A&M University Press.
- Martínez-Gallardo, C., & Schleiter, P. (2015). Choosing whom to trust: Agency risks and cabinet partisanship in presidential democracies. *Comparative Political Studies*, 48, 231-264.
- Norris, P., & Lovenduski, J. (1993). 'If only more candidates came forward': Supply-side explanations of candidate selection in Britain. *British Journal of Political Science*, 23, 373-408.
- Norris, P., & Lovenduski, J. (1995). *Political recruitment: Gender, race and class in the British parliament*. Cambridge University Press.
- Paxton, P., & Hughes, M. M. (2017). *Women, politics, and power: A global perspective*. CQ Press.

- Reynolds, A. (1999). Women in the legislatures and executives of the world: Knocking at the highest glass ceiling. *World Politics*, 51(4), 547-572.
- Samuels, D. J., & Shugart, M. S. (2010). *Presidents, parties, and prime ministers: How the separation of powers affects party organization behavior*. Cambridge: Cambridge University Press.
- Shugart, M. S., & Carey, J. M. (1992). *Presidents and assemblies: Constitutional design and electoral dynamics*. Cambridge: Cambridge University Press.
- Siaroff, A. (2000). Women's representation in legislatures and cabinets in industrial democracies. *International Political Science Review*, 21(2), 197-215.
- Slater, D. (2004). Indonesia's accountability trap: Party cartels and presidential power after democratic transition. *Indonesia*, 61-92.
- Studlar, D. T., & Moncrief, G. F. (1997). The recruitment of women cabinet ministers in the Canadian provinces. *Governance*, 10, 67-81.
- Studlar, D. T., & Moncrief, G. F. (1999). Women's work? The distribution and prestige of portfolios in the Canadian provinces. *Governance*, 12, 379-395.
- Thompson, M. (2015, December 4). Why dynastic female leaders win elections in Asia. Retrieved from <http://www.eastasiaforum.org/2015/12/04/why-dynastic-female-leaders-win-elections-in-asia/>.
- Tremblay, M., & Bauer, G. (2011). Conclusion. In G. Bauer & M. Tremblay (Eds.), *Women in Executive Power: A Global Overview* (pp. 171-190). New York, NY : Routledge.
- True, J., & Mintrom, M. (2001). Transnational networks and policy diffusion: The case of gender mainstreaming. *International Studies Quarterly*, 45, 27-57.
- Waylen, G. (2003). Gender and transitions: What do we know? *Democratization*, 10(1), 157-178.
- Whitford, A. B., Wilkins, V. M., & Ball, M. G. (2007). Descriptive representation and policymaking authority: Evidence from women in cabinets and bureaucracies. *Governance*, 20, 559-580.
- Zorn, C. J. (2001). Generalized estimating equation models for correlated data: A review with applications. *American Journal of Political Science*, 45(2), 470-490.

## Figures and Tables

Figure 1. Time-Series Plots of Female Politicians and Professionals in Cabinets by Country



*Note:* The plot illustrates the number of female politicians (dashed line) and professionals (solid line) appointed to cabinet by country over time.

Table 1. Regression Analysis of Women's Appointment to a President's Cabinet

| <b>Dependent Variable</b>             | <b>Model 1<br/>Percent Female<br/>Ministers</b> | <b>Model 2<br/>Percent Female<br/>Politicians</b> | <b>Model 3<br/>Percent Female<br/>Professionals</b> |
|---------------------------------------|---|---|---|
| Log (age of democracy), lagged        | 0.214***<br>(0.000)                             | 0.208<br>(0.202)                                  | 0.118*<br>(0.061)                                   |
| Constitutional powers                 | -0.011***<br>(0.002)                            | 0.001<br>(0.007)                                  | -0.030*<br>(0.012)                                  |
| Presidents' support in legislature, % | 0.165***<br>(0.058)                             | -0.122<br>(0.172)                                 | 0.486***<br>(0.085)                                 |
| Electoral cycle                       | 0.001***<br>(0.000)                             | 0.002**<br>(0.001)                                | 0.001**<br>(0.000)                                  |
| Term limits                           | 0.091***<br>(0.008)                             | 0.154***<br>(0.037)                               | 0.069***<br>(0.005)                                 |
| Female presidents                     | 0.019*<br>(0.011)                               | -0.105***<br>(0.061)                              | 0.200***<br>(0.017)                                 |
| Left party                            | 0.015<br>(0.013)                                | -0.083***<br>(0.027)                              | 0.087***<br>(0.020)                                 |
| Cabinet reshuffle, %                  | 0.095**<br>(0.040)                              | 0.173*<br>(0.097)                                 | 0.076<br>(0.049)                                    |
| Women in legislature, %               | -0.853***<br>(0.295)                            | -2.085*<br>(1.236)                                | -0.548<br>(0.497)                                   |
| Women in labor force, %               | -1.210***<br>(0.272)                            | -2.625**<br>(1.026)                               | -0.303<br>(0.448)                                   |
| Development level                     | 0.299***<br>(0.098)                             | 0.295<br>(0.382)                                  | 0.439<br>(0.295)                                    |
| Constant                              | 0.273<br>(0.182)                                | 0.773***<br>(0.265)                               | -0.026<br>(0.566)                                   |
| Wald $\chi^2$                         | 137.33  | 67.01   | 18.74   |
| Prob > $\chi^2$                       | (0.000)   | (0.000)   | (0.000)   |
| N                                     | 63  | 63  | 63  |

*Note:* The unit of analysis is a country-year. Dependent variables are women's share of cabinet ministers for Model 1, women's share of political ministers for Model 2, and women's share of professional ministers for Model 3. Robust standard errors in parentheses. Country-level fixed effects included in all models. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table 2. Logit Analysis of Female Politicians' Appointment to Different Types of Policy Positions

| <b>Dependent Variable</b>                | <b>Model 4<br/>High-<br/>prestige</b> | <b>Model 5<br/>Medium-<br/>prestige</b> | <b>Model 6<br/>Low-<br/>prestige</b> | <b>Model 7<br/>Masculine</b> | <b>Model 8<br/>Neutral</b> | <b>Model 9<br/>Feminine</b> |
|--|---------------------------------------|---|--------------------------------------|------------------------------|----------------------------|-----------------------------|
| Gender                                   | -0.755**<br>(0.361)                   | -0.513**<br>(0.118)                     | 1.877***<br>(0.390)                  | -1.499<br>(1.273)            | -0.419<br>(0.304)          | 3.093***<br>(0.590)         |
| Age                                      | 0.080***<br>(0.020)                   | -0.023<br>(0.023)                       | -0.091***<br>(0.005)                 | 0.029***<br>(0.006)          | -0.014<br>(0.013)          | -0.048**<br>(0.021)         |
| Education                                | -0.036<br>(0.171)                     | 0.126<br>(0.294)                        | -0.153<br>(0.387)                    | -0.130<br>(0.337)            | 0.093<br>(0.212)           | 0.206<br>(0.497)            |
| Legislative experience                   | 0.031***<br>(0.005)                   | -0.025<br>(0.029)                       | -0.024<br>(0.063)                    | -0.042*<br>(0.025)           | 0.057<br>(0.040)           | -0.040<br>(0.052)           |
| Log (age of<br>democracy), lagged        | 3.197<br>(2.012)                      | -0.964<br>(0.776)                       | -2.928<br>(2.950)                    | 2.651<br>(2.206)             | 1.060<br>(2.043)           | -7.627***<br>(1.569)        |
| Constitutional powers                    | -0.554***<br>(0.207)                  | -0.251**<br>(0.113)                     | 1.718***<br>(0.648)                  | -0.121<br>(0.122)            | -0.403***<br>(0.151)       | 2.440*<br>(1.272)           |
| Presidents' support in<br>legislature, % | -1.389<br>(0.906)                     | 2.008***<br>(0.494)                     | -2.751<br>(3.313)                    | 0.052<br>(0.988)             | 1.710<br>(1.588)           | -7.669**<br>(3.377)         |
| Electoral cycle                          | -0.009<br>(0.012)                     | 0.013<br>(0.016)                        | -0.008<br>(0.010)                    | -0.020***<br>(0.006)         | 0.014<br>(0.015)           | 0.025<br>(0.018)            |
| Term limits                              | 0.276*<br>(0.149)                     | 0.053<br>(0.157)                        | -0.336<br>(0.466)                    | -0.06<br>(0.284)             | 0.134**<br>(0.057)         | -0.150<br>(0.287)           |
| Female presidents                        | -0.927***<br>(0.214)                  | 0.402*<br>(0.213)                       | 0.808**<br>(0.362)                   | -1.818***<br>(0.263)         | 1.342***<br>(0.315)        | 16.08***<br>(2.021)         |
| Left party                               | -0.407***<br>(0.124)                  | 0.268<br>(0.226)                        | 0.096<br>(0.553)                     | -0.153<br>(0.101)            | 0.289<br>(0.264)           | -0.523***<br>(0.189)        |
| Cabinet reshuffle, %                     | -0.101<br>(0.321)                     | 0.029<br>(0.462)                        | 0.016<br>(0.506)                     | 0.737<br>(0.473)             | -0.187<br>(0.294)          | -1.365**<br>(0.617)         |
| Women in<br>legislature, %               | -14.20<br>(12.65)                     | 3.327<br>(7.070)                        | 17.70<br>(14.66)                     | -12.79<br>(10.24)            | 5.190<br>(11.20)           | 21.88**<br>(8.815)          |
| Women in labor<br>force, %               | -10.53<br>(11.17)                     | -9.009*<br>(5.103)                      | 47.82*<br>(27.94)                    | -11.61<br>(7.547)            | -5.764***<br>(2.047)       | 80.54***<br>(31.20)         |
| Development level                        | -6.871<br>(4.697)                     | 5.187<br>(4.390)                        | 0.470<br>(5.839)                     | -4.654<br>(3.581)            | 7.671**<br>(3.375)         | -3.378<br>(8.326)           |
| Constant                                 | 18.04<br>(12.97)                      | 7.283<br>(7.633)                        | -60.25*<br>(30.89)                   | 11.31<br>(7.200)             | 4.847<br>(4.569)           | -93.09**<br>(40.89)         |
| Wald $\chi^2$                            | 20.49                                 | 55.06                                   | 86.88                                | 5.92                         | 20.22                      | 1088.07                     |
| Prob > $\chi^2$                          | (0.000)                               | (0.000)                                 | (0.000)                              | (0.116)                      | (0.000)                    | (0.000)                     |
| Observations                             | 291                                   | 291                                     | 291                                  | 291                          | 291                        | 291                         |

Note: The unit of analysis is a minister with political backgrounds. Dependent variables: 1 if a minister holds a given post. Robust standard errors clustered on country in parentheses. Country-level fixed effects included in all models.



\*\*\*p&lt;0.01, \*\*p&lt;0.05, \*p&lt;0.1.

Table 3. Logit Analysis of Female Professionals' Appointment to Different Types of Policy Positions

| <b>Dependent Variable</b>                | <b>Model 10<br/>High-<br/>prestige</b> | <b>Model 11<br/>Medium-<br/>prestige</b> | <b>Model 12<br/>Low-<br/>prestige</b> | <b>Model 13<br/>Masculine</b> | <b>Model 14<br/>Neutral</b> | <b>Model 15<br/>Feminine</b> |
|--|--|--|---------------------------------------|-------------------------------|-----------------------------|------------------------------|
| Gender                                   | -0.414***<br>(0.137)                   | -0.803**<br>(0.327)                      | 1.616***<br>(0.271)                   | -1.159**<br>(0.472)           | -0.147<br>(0.395)           | 1.713***<br>(0.119)          |
| Age                                      | 0.060***<br>(0.013)                    | -0.045**<br>(0.023)                      | 0.005<br>(0.031)                      | 0.008<br>(0.021)              | -0.016<br>(0.020)           | 0.012<br>(0.007)             |
| Education                                | -0.683***<br>(0.078)                   | 0.360***<br>(0.084)                      | 0.564***<br>(0.190)                   | -0.338**<br>(0.159)           | -0.103<br>(0.134)           | 0.952***<br>(0.259)          |
| Legislative experience                   | -0.111<br>(0.284)                      | -0.066<br>(0.104)                        | 0.257<br>(0.224)                      | -0.260**<br>(0.103)           | 0.090<br>(0.165)            | 0.240<br>(0.250)             |
| Log (age of<br>democracy), lagged        | -1.053<br>(1.676)                      | 1.202<br>(1.127)                         | -0.611<br>(0.947)                     | -0.082<br>(1.424)             | 0.866<br>(1.764)            | -1.289<br>(1.095)            |
| Constitutional powers                    | -0.005<br>(0.097)                      | 0.091<br>(0.078)                         | -0.091<br>(0.112)                     | 0.332*<br>(0.172)             | -0.177<br>(0.172)           | -0.233***<br>(0.054)         |
| Presidents' support in<br>legislature, % | 1.686***<br>(0.635)                    | -0.046<br>(0.919)                        | -2.522**<br>(1.261)                   | -1.623<br>(1.841)             | 1.796<br>(1.526)            | -0.240<br>(1.100)            |
| Electoral cycle                          | -0.003<br>(0.009)                      | -0.001<br>(0.005)                        | 0.006<br>(0.014)                      | 0.005<br>(0.014)              | -0.006<br>(0.010)           | -0.0002<br>(0.011)           |
| Term limits                              | 0.417***<br>(0.094)                    | -0.088<br>(0.162)                        | -0.406<br>(0.279)                     | 0.525<br>(0.425)              | -0.135<br>(0.221)           | -0.722<br>(0.555)            |
| Female presidents                        | -0.446**<br>(0.188)                    | 0.532**<br>(0.222)                       | -0.296<br>(0.436)                     | 0.296<br>(0.257)              | 0.381**<br>(0.153)          | -0.773**<br>(0.367)          |
| Left party                               | 0.276***<br>(0.093)                    | 0.038<br>(0.193)                         | -0.386<br>(0.377)                     | -0.260<br>(0.248)             | 0.206<br>(0.194)            | 0.162<br>(0.136)             |
| Cabinet reshuffle, %                     | -0.084<br>(0.415)                      | 0.213<br>(0.217)                         | -0.234<br>(0.642)                     | -0.389<br>(0.588)             | 0.552<br>(0.338)            | -0.113<br>(0.699)            |
| Women in<br>legislature, %               | -3.310<br>(7.165)                      | -3.661<br>(5.511)                        | 10.70**<br>(4.264)                    | -2.380<br>(6.359)             | -7.264<br>(5.983)           | 16.19***<br>(4.116)          |
| Women in labor<br>force, %               | -4.815<br>(7.372)                      | 3.072<br>(5.992)                         | 2.804**<br>(1.237)                    | 13.77*<br>(7.553)             | -17.17***<br>(6.650)        | 6.177<br>(8.681)             |
| Development level                        | -2.313<br>(3.944)                      | -0.035<br>(2.155)                        | 3.038<br>(6.647)                      | 0.712<br>(2.719)              | -5.300*<br>(3.073)          | 9.353***<br>(2.078)          |
| Constant                                 | 1.206<br>(6.958)                       | -2.107<br>(5.031)                        | -4.145<br>(6.238)                     | -14.05*<br>(7.356)            | 16.21***<br>(5.864)         | -9.554*<br>(4.998)           |
| Wald $\chi^2$                            | 0.77                                   | 2.81                                     | 53.33                                 | 34.79                         | 74.59                       | 27.69                        |
| Prob > $\chi^2$                          | (0.857)                                | (0.422)                                  | (0.000)                               | (0.000)                       | (0.000)                     | (0.000)                      |
| Observations                             | 445                                    | 445                                      | 445                                   | 445                           | 445                         | 445                          |

Note: The unit of analysis is a minister with professional backgrounds. Dependent variables: 1 if a minister holds a

given post. Robust standard errors clustered on country in parentheses. Country-level fixed effects included in all models. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .